

REMARKS

In the Office Action mailed January 20, 2006, claims 20 and 25 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,484,265 (issued to Borkar et al.; hereinafter “Borkar”); claims 26-29 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,889,332 (issued to Helms et al.; hereinafter “Helms”); claims 1, 2-11, 16-19, 21, 23, 24, 30, 32 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Borkar in view of U.S. Published Patent Application No. 2003/0229816 (in the name of Meynard et al.; hereinafter “Meynard”); claims 12, 13 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,490,059 (issued to Mahalingaiah et al.; hereinafter “Mahalingaiah”) in view of Meynard; claims 22 and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Borkar in view of Meynard, and in further view of Helms; and claims 14 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mahalingaiah in view of Meynard, and in further view of Borkar and U.S. Patent No. 6,963,992 (issued to Cheng et al.; hereinafter “Cheng”). Claims 18 and 31 were objected to for various informalities. Applicants respectfully traverse and request reconsideration.

Applicants initially note that claims 1-11, 14 and 20-33 have been canceled above, thereby rendering the rejections/objections of these claims moot. No further discussion of canceled claims 1-11, 14 and 20-33 will be provided. The remaining claims pending in the instant application are independent claims 12 and 17 and their respective dependent claims 13, 15, 16, 18 and 19.

Regarding the objection to claim 18, the proper dependency has been added by amendment above and Applicants respectfully submit that claim 18 is in proper form for allowance.

Applicants further note that claim 12 has been amended above to recite the limitation of a “control signal”; i.e., that the “thermal sensor control circuit . . . provide[s] a control signal in response to the temperature data,” and that the “dynamic overclock frequency control data generator . . . provide[s] dynamic overclock frequency control data to the clock generator circuit in response to the control signal and the received temperature data.” More particularly, the control signal recited in amended claim 12 causes the dynamic overclock frequency control data generator to “increase the operating frequency of the clock signal above the nominal operating frequency” in response, in part, to the control signal. Applicants respectfully submit that none of the cited references teach or even suggest this limitation, thereby rendering amended claim 12 both novel and non-obvious.

Applicants agree with Examiner’s assertion, as found in the rejection of claim 14, that Mahalingaiah, Meynard and Borkar fail to teach providing a control signal to the dynamic overclock frequency control data generator in response to the temperature data. Indeed, the cited reference in this regard is found in col. 3, lines 5-17 of Cheng, where it is taught:

The signals CPUCLK, SDRAM, AGPCLK, PCICLK, and APIC may be implemented as system clock signals. In one example, the signals CPUCLK, SDRAM, AGPCLK, PCICLK, and APIC may be used as clock signals for a central processor unit, a synchronous dynamic random access memory, an accelerated graphics port, a peripheral component interconnect, and an advanced programmable interrupt controller, respectively. However, other numbers and uses of signals may be implemented accordingly to meet the design criteria of a particular application. For example, two or more (or all) of the components of the microprocessor system may use the same clock signal.

As seen from the above-quoted portion of Cheng, the sole reference to an kind of control signal is to note that the various signals generated in accordance with the techniques taught by Cheng may be used to clock, among other things, “an advanced programmable interrupt controller.” This is wholly unrelated to the limitations of claim 12 concerning a control signal.

Particularly, Cheng's disclosure in this regard clearly fail to teach any aspect of providing any kind of control data, much less dynamic overclock frequency control data, to a clock generator circuit in response to a control signal and received temperature data thereby causing the clock generator circuit to increase the operating frequency of the clock signal above the nominal operating frequency. For at least this reason, Applicants respectfully submit that the cited references, either alone or in combination, fail to either anticipate or establish prima facie obviousness of claim 12, which claim is therefore in suitable condition for allowance. Applicants further note that claim 17 has been amended above to include, among other things, substantially identical "control signal" limitations. For the same reasons discussed above with respect to claim 12, Applicants respectfully submit that claim 17 is likewise in suitable condition for allowance.

Furthermore, claims 13, 15, 16, 18 and 19 are dependent upon claims 12 and 17, respectively. Because claims 13, 15, 16, 18 and 19 incorporate the limitations of the claims 12 and 17, Applicants respectfully submit that claims 13, 15, 16, 18 and 19 are also in suitable condition for allowance for the reasons presented above with respect to claim 12.

Accordingly, Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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